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SHIAWASSEE COUNTY BREEDERS' ASSOCIATION.

The third annual meeting of this Association was held at Bancroft, on the 29th ult., with a large attendance of farmers and stock breeders. President J. W. Hibbard called the meeting to order, and read his annual address, which we give in full. It contains some very practical suggestions:

Ladies and Gentlemen and Members of the Association:—We are again gathered together for the comparison of our past experiences in the pursuit of our noble calling—agriculture and tilling of the soil; and if possible to learn from each other's experience what will be useful to us in the future. While the past year has not been one of great encouragement to us, yet as long as there is life there is hope, and we should be able to learn something which will be useful to us in the future.

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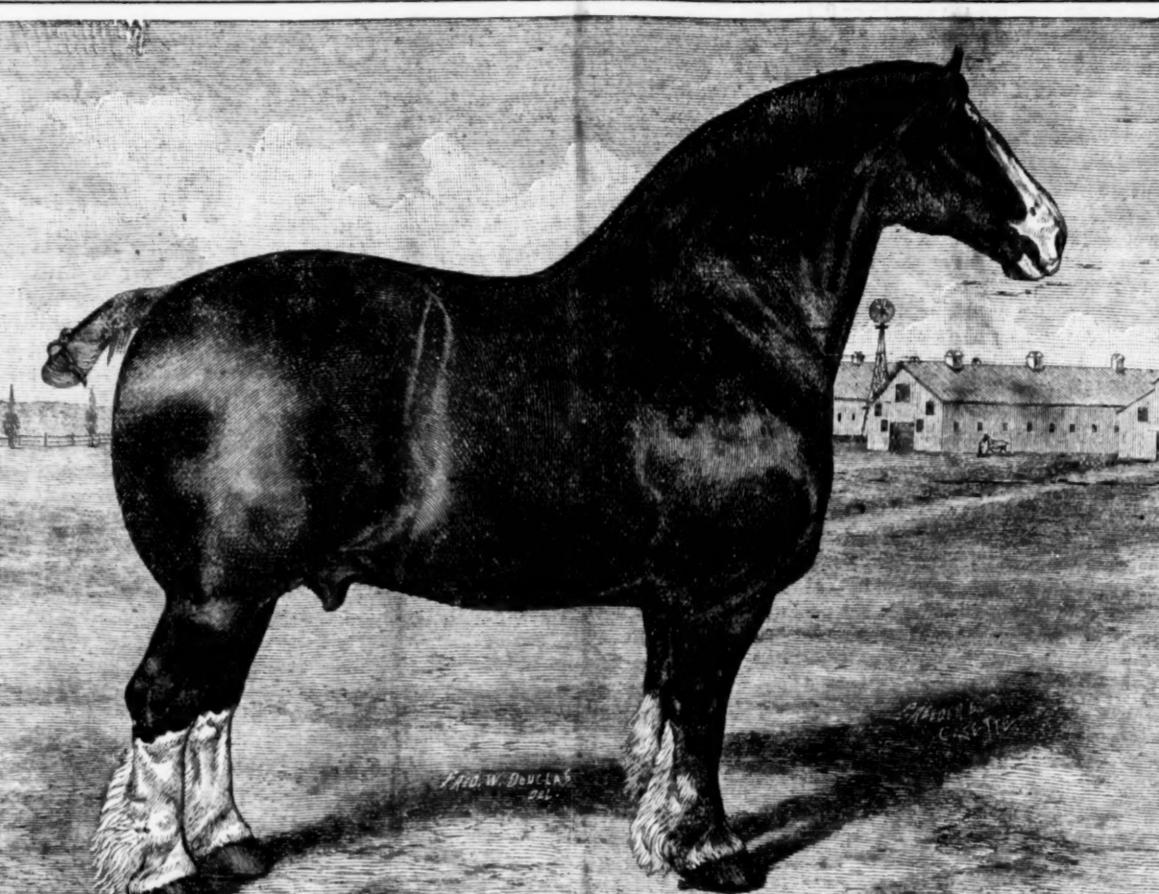
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Commerce.



NABOB 2152(2850)

English Shire Stallion Nabob (2850) 2152, imported and owned by the Galbraith Brothers, Janesville, Wis.

For the Michigan Farmer.
ROTATION AND CULTIVATION.

I stepped into the Shorthorn Breeders Association, at Jackson, the other day, expecting to hear a full-blood on thoroughbred breeding, but was agreeably and happily surprised with a sound and practical talk on farming by Prof. Johnson, lately from the college halls of the agricultural school at Lansing. It was hard for me to keep my seat and withhold my commendation, but I considered myself out of place in a full blood meeting. The Professor's theory of rotation in crops is the rotation I have practiced for years, and shall continue to practice till I see another pay better financially. And this will explain my enthusiasm.

This is the Professor's rotation: After meadow, corn two years, oats, wheat and meadow again. I use corn only one year. This course demands only one heavy cultivation. The meadow is plowed ten inches deep. The other cultivations are light single team work, and if the crops do not turn out well, the expense has been materially lessened. The old summer fallow plan of wheat raising requires the land two years for one crop of wheat, and it takes more labor to fit the summer fallow for wheat than it does for oats and wheat too in the rotation, and the oat crop is obtained without expense save the harvesting and threshing.

Right here I wish to give my experience in harvesting oats last year. I bound one field. The weather was damp and I was delayed one week on the other, and that was the difference in sowing the two fields. The bundles were not fit to stack, and looked as though they would have to be unbound. I cut the last field with a reaper with swing reel set to rake, which made almost a continuous swath. The next day they were fit to stack. A horse rate took two swaths to bunches dropped in rows, the hay loader put them on the wagon very carefully without shelling, the horse fork put them in a stack. These machines handle oat this way better than timothy hay. It will be my way to harvest oats hereafter. Besides, the threshers did not complain and did a better job. With the loader and horse rake the loose oats would handle as bundles.

In the rotation the professor thought the one crop fitted the soil for the next. It so appears to me; but I do know that the expense is less for the same crops in money. I wish to relate a fact in this rotation which I promised you some time ago: My corn was tall and large; I cut it two to three feet high. When spring came the stubble was there yet. The sulky plow could not cover the stubble running short of ten inches deep. It was the first dry season; the ground was very friable; the float put the surface in perfect order; to drag would bring up much stubble. I put the drill on, and the oats were sown without rolling. The straw seemed to grow well in the drought, but I did not expect any grain, the soil was so loose and unpacked. The threshers claimed it was the best crop threshed that season—forty bushels per acre.

The oat stubble was high, and the plow had to run deep again. Once floating put the surface in perfect order. The drill was applied and the wheat sown without rolling. The drought continued, but the straw seemed to do well, and the threshers claimed it the best crop threshed that season, in quality and quantity.

This is contrary to summer fallow practice—ground worked down hard. It is opposed to all theory, but as John Gough in his famous temperance lecture said, "These are facts." Will the professor explain? Nature is not fickle. She works by exact rule. Two and two are always four.

SAMUEL CHAPEL.

ENGLISH SHIRE STALLION.

Nabob (2850) 2152, whose picture appears on this page, is a chestnut horse, foaled in 1881, and bred by W. Lavender, Biddenden, Nottinghamshire, England. He was imported by the Galbraith Brothers the past year. He is a very large horse, weighing 2,900 lbs. His sire was Rutland Champion (2490), dam Smiler by King Tom (1272). Rutland Champion (2490) was by Champion (441), dam Ball by Champion (410), tracing to Waxwork (2263), by New's Matchless. The sire of Nabob's dam, King Tom (1272), was sired by Honest Tom (1105), tracing to Barry's King of the Country. As a show horse Nabob has been very successful. He won first prize at the Bedford Agricultural Society's Show in 1881; third at the Shire Horse Show, London; first at the Royal Agricultural Society Show at Shrewsbury; first and champion at Staffordshire Show at Stone, all in 1884; medal at Tamworth, Staffordshire, in 1885; second at Shropshire and Midland Show at Wolverhampton; second at South Wales, Cardiff, in 1886; second at the Shire Horse Show, London, in 1887; highly commended at the Shire Horse Show, London, in 1888; reserve and highly commended at the Shire Horse Show, London; also 210 prize and special medal at Staffordshire Show at Walsall, and special prize for the best animal of any breed, and fourth prize at the American Horse Show, Chicago, in 1889.

Grand Blanc Farmers' Club.

To the Editor of the Michigan Farmer.

The Grand Blanc Farmers' Club is alive, notwithstanding the severe strain upon it of the weather, grippe and mud. We held a meeting at Davis' Hall, Grand Blanc, on Saturday evening, Feb. 1st; there was a good attendance and much interest in the papers read.

Mr. D. P. Dewey's paper on the breeding and care of sheep was an excellent one; it gave good suggestions that it will prove good to many to try and carry out.

Mr. Grant Cheney's paper on the care and management of horses was also a good one. He commenced at the birth of the colt, showed how he should be cared for until he was four years old; this paper brought out a general discussion as to whether the colt should be fed any grain after one year old. The writer's opinion was that it was best to rough it until three or four years old without grain, but the majority was against him.

The next meeting is to be held at Mr. Grant Cheney's on Feb. 21st. Prof. Farmer gives a talk on the disease of the horse, and Mr. G. S. Porter a paper on the raising and feeding of cattle.

C. CLARK.

food than to buy commercial fertilizers; that barnyard manure was the only practical beneficial dressing for crops and the land; the barnyard was the farmer's mint for successful farming. The farmers do not make as much dressing as they might, because they fail to save all the elements entering into it. As to the breed of cattle to produce the most dressing, the speaker took the ground that the Shorthorn was in the lead. What is produced on the farm should be spent on the farm if it is to be kept in a productive condition. He did not have any faith in commercial fertilizers, and advocated the plowing under of green crops as fertilizers. Manures should be well mixed to get the best return in crops.

Messrs. John C. Sharp, Frank Willson and George S. Wilson, of Jackson, and R. D. M. Edwards, of Horton, discussed the question at length, giving their experience in the use of fertilizers, their opinion being that manures made on the farm were the best, all things considered.

Prof. Samuel Johnson, of Lansing, followed with an address on "Personal Legislation on the Farm." He said the prevailing hard times, low price of farm products, no buyers, the formation of trusts, combines, cartels, syndicates and adverse legislation had led the farmer to become disheartened, and afforded him a just cause for grumbling. There was, of course, diversity as to the real cause for the present condition of things; some, looking at it from a political standpoint, attributed it to want of protection, others to over-protection, and some thought free trade would bring prosperous times again, but whatever the cause the relief was in the farmers' own possession—better knowledge of farming, better stock, better tillage. If better times are to be expected from legislation it will be of slow growth, if at all, but farmers should see to it that wholesome legislation is enacted.

Right here I wish to give my experience in harvesting oats last year. I bound one field. The weather was damp and I was delayed one week on the other, and that was the difference in sowing the two fields. The bundles were not fit to stack, and looked as though they would have to be unbound. I cut the last field with a reaper with swing reel set to rake, which made almost a continuous swath. The next day they were fit to stack. A horse rate took two swaths to bunches dropped in rows, the hay loader put them on the wagon very carefully without shelling, the horse fork put them in a stack. These machines handle oat this way better than timothy hay. It will be my way to harvest oats hereafter. Besides, the threshers did not complain and did a better job. With the loader and horse rake the loose oats would handle as bundles.

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SHORTHORN MEN IN CONVENTION.

From the Jackson Patriot we get a summary of the proceedings of the Southern Michigan Shorthorn Breeders' Association, which met at Jackson last week. President J. S. Flint, in his annual address, said the meetings of the Association had been generally successful. He gave it as his opinion that the decline in the price of cattle is due to poor management, buying too liberally of machinery and other goods, high taxes, high rate of interest, usury, elevator charges, and high freight rates. Of course these "business men" think Dakota a grand place for settlers, and want more of them to come in. It is probable that they have got about everything the present settlers took into the State with them, and naturally are looking for more gudegeons. In the statistics furnished by those "business men," it is stated that sixty per cent of the farmers have a part or all of their real estate mortgaged, and five per cent have a part or all of their chattels mortgaged. On the whole, we should consider Dakota a good State for farmers to avoid so long as present conditions obtain. A farmer who has a home in Michigan would be very foolish to sell out and move into such a State—and there are other western States and Territories enjoying much the same condition.

There is no longer reason to doubt that thousands of the people who have made their homes in Dakota in the last year or two, are actually in a condition bordering upon starvation. Many of these people were induced to sell their homes in the older States and move to Dakota by the tales of unpreserved land dealers, aided by extensive advertising in the newspapers, and have lost everything by so doing. The farmers assert that it was the drought which caused their destitution, while a committee of business men, appointed to inquire into the condition of farmers, report that "to other causes besides drought must be attributed the greater portion of the appeals for aid." They enumerate these causes as "poor management, buying too liberally of machinery and other goods, high taxes, high rate of interest, usury, elevator charges, and high freight rates." Of course these "business men" think Dakota a grand place for settlers, and want more of them to come in. It is probable that they have got about everything the present settlers took into the State with them, and naturally are looking for more gudegeons. In the statistics furnished by those "business men," it is stated that sixty per cent of the farmers have a part or all of their real estate mortgaged, and five per cent have a part or all of their chattels mortgaged. On the whole, we should consider Dakota a good State for farmers to avoid so long as present conditions obtain. A farmer who has a home in Michigan would be very foolish to sell out and move into such a State—and there are other western States and Territories enjoying much the same condition.

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The Horse.**AMERICAN TROTTERS FOR EUROPE.**

The superintendent of the breeding stables of the Berman Brothers, of Berlin, Germany, is now in the United States purchasing trotting horses. The firm have a few now, picked up from those sent over to Europe, and are so well satisfied that they propose investing about \$25,000 in them. The superintendent, Merritt Tappan, has purchased so far two carloads, mostly young horses, and largely from the West. Among the animals with records he has secured President Garfield, sire of Star Lily, 2:20; the gelding Little Thorne, 2:33½; by Dantless S188, dam Nannie Thorne by Hamlet 160; and Katty G., 2:35. Also the gelding Racer B., 2:25, by Katty Whaley 2214, dam not traced. Mr. Tappan proposes stopping off at Rome, N. Y., and securing a few more.

This is a notable event in the history of the American trotter, for it opens up a market of boundless proportions to enterprising breeders, and will be sure to bring back to this country some of the millions expended by Americans for foreign bred horses. It is as certain as anything well can be which has not yet come to pass, that the demand for American trotting horses will grow rapidly from this time forward, and such purchases as those by the Berman Brothers become common. Owing is very sure, the good qualities of the breed will make them favorites wherever they may go, and whether on the track or in the breeding stable they will maintain the reputation which is making them famous throughout the civilized world.

IS HE STANDARD?

BATH, Jan. 29, 1890.

To the Editor of the Michigan Farmer.

I have a very fine stallion colt, a yearling, sired by Greenbacks 248; dam of three years old; trial in 2:31. Four years, Price, \$1,500. She was sired by Lexington Chief Jr. (21:3), dam G. p. (dam of Ruby, 2:35½ L. C. H., four-year-old record of 2:35, trial to pole, 2:32½); and President Garfield, sire of Star Lily, record 2:20. There have been four of Gipsy's colts sold now for the sum of \$7,910, and four of her grand-daughters have brought \$3,600. These are all Plainwell, Mich., bred horses.

A BILL has been introduced into the New Jersey Legislature limiting horse racing in New Jersey to the period between June 1 and October 1, and confining the sport to 30 days duration on any track. Five per cent of the gross receipts of the gate and pool privileges are to be paid by each association to the State, the money to be distributed by the State among the agricultural societies, which shall develop it to the encouragement of cattle breeding. The penalty for violation of this law is fixed at two years imprisonment and \$1,000 fine.

An Australian writer says: "I wish all horsemen know the value of sunflower seeds. It is not only one of the best remedies for hives, but a horse which has recently recovered can be entirely cured by being given half a pint twice a day for a week in his feed. Last autumn I took an otherwise valuable young horse, which was so stiff you couldn't hardly get it out of its stall. In two weeks you wouldn't know that anything was the matter with it, and it has been all right ever since." While we doubt the founder cure, it is a well known fact that sunflower seeds contain valuable remedial powers in certain diseases of animals and fowls.

A. A. C. FISK, of Coldwater, probably the oldest breeder of trotting horses in the State, has sold his stallion Hambletonian Wilkes 1679, by Old Ethan Allen; he by Vermont Black Hawk 5, ne by Sir Morgan, son of Justin Morgan, 2½ dam by Major Nicholls; 3½ by Stephen A. Douglas 422; dam of Superb Mischief by Hambletonian 514; he by Shopman Hambletonian, a son of imported Messenger. Is this colt or dam eligible to registration under rule seven? Please answer through the FARMER and oblige.

A SUBSCRIBER.

Rule 7th now reads as follows: "The female progeny of a standard horse when out of a mare by a standard horse." The dam of your colt being by a standard horse, Superb, and her dam by a standard horse, Major Nichols, she is entitled to registration. The rule formerly read: "The progeny of a standard horse out of a mare by a standard horse." Under it your colt would be eligible to the standard. The change excludes him, as only females are now included in the rule. He will be entitled to register when he sires two animals with records of 2:30, or secures a record of 2:30 himself and sires one animal with a record of 2:35 or better. All the same the colt is splendidly bred, and should soon force his way into the list.

Intelligence of the Horse.

As the intelligence of animals is no new subject, perhaps nothing new can be said regarding it, but it is a subject that will bear repetition as long as man and animal's continue to exist. For do we not see every day some of our fellow-men who need to be reminded of the very evident fact that their intellect isn't so much superior, after all, to that of dumb creatures? Living on a farm, where horses, cattle, sheep and pigs are kept, gives one a good opportunity to study these representatives of the animal kingdom, and I find that indeed their intelligence is surprising.

I believe that horses and dogs are the most sagacious of all the animals that inhabit this terrestrial sphere. (I suppose the happy possessors of "dear little poodles," and "precious pugs" will be pleased to read this sentence.) But as we do not keep dogs, and I am not partial to those of my neighbors, and am very fond of horses, I shall make the intelligence of the latter the subject of my remarks.

We hear and read of the wonderful feats performed by trained horses, and so do we think as we see the horse every day, of his capability to understand, or the likeness of his actions to those of human beings? There is the sensitive, nervous horse which keeps all his feet in the air at the same time if the whip is brought anywhere near him, so like the nervous man, who, on becoming excited, can hardly tell what is his name or where he lives; the balky or contrary horse, like a sulky child refusing to mind its mother; the horse that strides along in a lazy fashion, reminding us of the easy-going man who lets-to-morrow take care of itself.

We hear of this horse that kicks, another that bites, and so on through the list of a horse's sins, never stopping to wonder if there are causes for such displays of ugliness. If we did, I think we would be surprised at the number of times we should find the horse was justified in his action. Do you blame horses for showing some temper if you know they have been cruelly abused? Of course not. If they are kindly cared for, no animal can show more affection. One day not long ago I witnessed the following incident. A young man was harnessing a mare which he had, as he expressed it, "made a baby of from a colt." As he was buckling a girth, a friend standing near pushed him a little. Quick as a flash the mare bit at the offender, and then rested her nose on her master's back with a look of affection which spoke more plainly than words.

A man's horse should, like his children, be taught to obey as well as to love him; but if a man shows the least timidity near a horse the animal only too quickly recognizes the fact and seems to enjoy annoying him. Are not such horses like the human beings who enjoy exercising their authority over weak mortals that may for some reason be under their control?

What man, while riding in a dark night, does not let the rains be loose, trusting his faithful steed to keep the road? What but intelligence gives a horse power to distinguish a chaff from a man?

There was on our farm for many years a horse known as "Old Jim." He would invariably kick if touched with a whip while

he was standing in the stable. One day, my sister, then a very small child, was found in the stable switching "Old Jim" about the legs with a small stick which she had picked up. The horse, though showing his dislike to such a performance by getting as far away as possible, never offered to harm the child, who enjoyed seeing him move around. It was "Old Jim" that took us to school on stormy days in winter, going home without a driver, and he was the horse that I drove home from our village, a distance of three miles, when I was three years old.

Isn't this every day intelligence of a horse just as wonderful as that shown on special occasions by horses that have been purposefully trained for days, weeks and months? Give a horse the credit due him, then. Treat him as if he knew something, and possessed the sense of feeling.—*Farmer's Daughter in Horse and Stable.*

Horse Gossip.

S. A. BROWNE & CO., of Kalamazon, have purchased from S. Osborne, of Cumbria, a yearling filly by Ambassador, dam May Hastings, by W. H. Vanderbilt.

PRINCE WILKES, son of Red Wilkes, record 2:1½, now owned at Buenos Aires, South America, has won \$13,500 the past season, trotting his best mile since his arrival in that country in 2:15½.

TROTTING meetings are now fully inaugurated at Vienna, and the dates for 1890 are as follows: Spring meeting—May 4, 6, 8, 11, 13, 15 and 18. Summer meeting—August 10, 13, 15 and 17. Autumn meeting—September 28 and October 2, 5, 9 and 12.

WHEAT STRAW is very much used in the south of England for horses. It is cut off with clover hay, in the proportion of one of straw to two of hay, but more to prevent the clover-chaff from balling in the animal's stomach than from any idea of its containing much nourishment.

A. P. FLEMING, of Webster City, Iowa, has purchased of R. J. Ashton, of Lima, Ohio, the stallion, record 2:35½ at three years old; trial in 2:31. Four years, Price, \$1,500. She was sired by Lexington Chief Jr. (21:3), dam G. p. (dam of Ruby, 2:35½ L. C. H., four-year-old record of 2:35, trial to pole, 2:32½); and President Garfield, sire of Star Lily, record 2:20. There have been four of Gipsy's colts sold now for the sum of \$7,910, and four of her grand-daughters have brought \$3,600. These are all Plainwell, Mich., bred horses.

A BILL has been introduced into the New Jersey Legislature limiting horse racing in New Jersey to the period between June 1 and October 1, and confining the sport to 30 days duration on any track. Five per cent of the gross receipts of the gate and pool privileges are to be paid by each association to the State, the money to be distributed by the State among the agricultural societies, which shall develop it to the encouragement of cattle breeding. The penalty for violation of this law is fixed at two years imprisonment and \$1,000 fine.

An Australian writer says: "I wish all horsemen know the value of sunflower seeds. It is not only one of the best remedies for hives, but a horse which has recently recovered can be entirely cured by being given half a pint twice a day for a week in his feed. Last autumn I took an otherwise valuable young horse, which was so stiff you couldn't hardly get it out of its stall. In two weeks you wouldn't know that anything was the matter with it, and it has been all right ever since." While we doubt the founder cure, it is a well known fact that sunflower seeds contain valuable remedial powers in certain diseases of animals and fowls.

A. A. C. FISK, of Coldwater, probably the oldest breeder of trotting horses in the State, has sold his stallion Hambletonian Wilkes 1679, by Old Ethan Allen; he by Vermont Black Hawk 5, ne by Sir Morgan, son of Justin Morgan, 2½ dam by Major Nicholls; 3½ by Stephen A. Douglas 422; dam of Superb Mischief by Hambletonian 514; he by Shopman Hambletonian, a son of imported Messenger. Is this colt or dam eligible to registration under rule seven? Please answer through the FARMER and oblige.

A SUBSCRIBER.

The Farm.**A Pork-Making Experiment.**

One of the most interesting features of the Lone Rock, Wis., institute was the report given by L. H. Adams, of the Experiment Station, of a hog feeding experiment, just completed, in which the feed used was corn meal and ground barley, the object of the experiment being to determine the relative values of those foods for pork-making. Ten hogs, weighing an average of 300 pounds each, were taken from clover pasture in September and divided into two lots of five each, the division being made with a special yoke to have each lot as nearly alike as possible. One lot was fed corn meal, the other ground barley. The experiment covered a period of fifty-six days. The five fed upon corn meal ate 3,000 pounds of meal and gained 761 pounds. Figuring the value of corn meal at 60 cents per 100 pounds, or \$1.80 a ton, this gain of 713 pounds cost \$1.80. With pork at \$3.50 per 100 pounds the gain made was worth \$24.95, leaving a profit of \$6.35. Reducing the meal fed to bushels of 55 pounds each we find that 55½ bushels of corn meal fed to such hogs gave a return of 45 cents a bushel, if the pork sold at 3½ cents a pound on foot.

The other lot of five hogs, in 56 days, ate 2,832 pounds of ground barley and made a gain of 601 pounds. Figuring the ground barley at one cent a pound, or \$20 a ton, this gain of 601 pounds of pork cost \$8.32. At three and a half cents per pound the pork made would be worth \$21.04, leaving a clear loss from the feeding of \$7.28. Reducing the gain to bushels, we find that 59 bushels of barley fed to such hogs, with pork at 3½ cents per pound, gave a return of 35 cents a bushel.

The experiment was commenced by feeding the grain dry in both cases, but it was soon discovered that the hogs would not eat sufficiently of the dry meal to make the desired gain, and wetting the meal was resorted to for both lots, feed for each day being wet the previous night. Weighing all of the hogs daily proved that, while they ate much more wet meal than they would of the dry, the gain made was more rapid in proportion to the amount eaten. This was, doubtless, owing to the fact that the food of support—the amount necessary to sustain the growth already made—was no greater at one time than at the other, and the more that was beyond that amount the greater daily gain must necessarily follow, so long as the food was properly assimilated.

This experiment, while it may not settle the question of the relative pork-making value of corn and barley under all considerations, is certainly of value as fixing a basis from which one may figure the probable results under other conditions. The prices given for the two kinds of feed are those which they were worth at Madison at the time of making the experiment—corn at \$12 a ton and barley \$20 a ton.—*Milwaukee Sentinel.*

An Object Lesson.

The Maine Farmer says that Dr. T. H. Hoskins, of Vermont, although some what advanced in years, has the pluck that would honor even a young man. He has purchased a \$2,400 farm and proposes to pay the purchase money, with interest, from the farm in five years; and he'll do it. He has 12 acres of potatoes, two of corn and 20 of beans, all nicely taken care of by two men with two horses. As his farm gives him a living and much more, he seems to be doing this to show to others what can be done when a man knows how and has the courage to go at it. All honor to so worthy an example. To the above Mr. Hoskins replies:

"Our Maine friend is right when he says that personal gain is not our first object in this experiment, though we shall be sorry to make a little money out of it.

What we chiefly seek to do is to prove by practical demonstration that these cheap farms in Vermont are worth a great deal more than they are selling for. If we succeed in this, we hope it will be an encouragement to many others, and indirectly a benefit to the whole State."

Agricultural Items.

FARMERS in Crawford County, Kansas, decrease the crop by dropping corn soaked in strychnine in the furrows as they plow. It is the easiest thing in the world to bury them right on the spot by turning a furrow over on them.

The Millstone, noting the order recently placed in the United States for several hundred elevator outfitts for the Argentine Republic, says we may confidently count on trouble from that quarter in our wheat trade in two or three years.

N. J. SHEPHERD says that for sheep and cows in milk there are few food materials that will equal bran, wherever it can be obtained at a fair price. With milk, it is one of the best foods for growing pigs; and fed to oats, it reduces the amount of grain necessary to continue growth.

SHEEP-SHEARING by machine, is now practiced by many of the large sheep ranches in Australia, the machine being now so constructed as to meet the practical requirements of the case. A new machine has a portable eight horse-power engine supplying the power to 28 shearing machines, capable of shearing 113 each per day.

KANSAS stockmen have organized a State Association, with S. O. Thatcher, of Lawrence, president, and W. A. Peffer, of the Kansas Farmer, secretary. The association passed a resolution, adopted by the State legislature, requiring that a national inspection law be enacted by Congress, to prohibit the importation of foreign cattle at a high price when its superiors can be had at home at a reasonable cost. There has been too much of that kind of business done already, and it is time the people of the United States refused to be fooled any longer with these wonderful foreign bred horses, with only a high-sounding name to recommend them.

BESIDES purchasing the stallion Hambletonian Wilkes at Coldwater last week, Mr. James Murphy, of Chicago, selected and purchased the following: Bay horse, Hambletonian Wilkes 1679, foaled 1879, by Royal Chief Jr.; 214; second dam by Surprise, by Ethan Allen; third dam by Mauna Charla. Purchased of E. E. Beardson, of Boston; price, \$1,000.

Chestnut gelding, Hambletonian Mid., record 2:35, foaled 1884, by Mainer's Chief, (son of Hambletonian Chief Jr.), 214; dam by Frank Morris. Purchased of Mrs. J. D. Mizner, Burr Oak; price, \$1,000.

Bay horse, Dolly Smith, foaled 1879, by Ethan Allen; second dam by Bonnie Bonita, by Hambletonian Chief Jr.; 214; third dam by Bonita, by Ethan Allen. Purchased of E. C. Fisk, of Camp Hill, Pa., price, \$1,000.

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Bay gelding, Dolly Smith, foaled 1879, by Ethan Allen; second dam by Bonnie

Horticultural.

SOUTH HAVEN POMOLOGICAL SOCIETY.

The South Haven Pomological Society considered the trimming and pruning of fruit trees at its last meeting, and considerable difference of opinion was found to exist on the subject. While some would start peach trees branching at two feet others would start branches at two and a half to three feet. All would trim high enough for a horse to pass under the branches, cut out the center of the tree to let in the air and sunlight, cut out the dead wood as far as possible, and cut back the limbs that were reaching out too far. Some recommended as best time to trim whenever you have time with a sharp knife or saw. Others opposed pruning before spring, thinking the cold weather would injure the tree if pruned in fall or winter, especially the peach, and as taste differ each one should study the soil, lay of ground, and habits of the tree, before pruning. Most people do not trim enough to get the largest and best fruit. Low limbs are easier to pick from than high, and less liable to be injured by the wind. Set trees a little inclined to the southwest, as the heavy winds are from that direction.

J. G. Ramsdell advocated trimming twice each year, during winter and in July, and thought that extensive trimming is the cheapest way to thin.

Clark Soeder said in California they cut back the limbs all around outside making a fine shape and a dense center, to prevent sun scald. But California ways would not always do in Michigan.

W. H. PAYNE, Sec.

BERRIEN COUNTY HORTICULTURAL SOCIETY.

The annual election of officers of this society resulted in the choice of the following persons: President, R. Merrill; Vice-Presidents, S. G. Antisale, W. L. Smith, S. Handy, W. L. Lane, B. F. Pixley; Secretary-Treasurer, A. J. Koisely. The report of the Secretary showed the Society is in a good condition, financially. The question of peach culture was then taken up, and discussed with considerable animation. Extracts from the Horticultural Report for 1888, showing new trees could be planted on the site of dead ones with success, were read.

Mr. Handy did not think that pits from diseased trees would grow, nor that good trees could be got by budding from diseased trees. He would have no more hesitation about getting trees from New Jersey than from Michigan.

Mr. Smith asked the question, "If buds will not grow from diseased trees, where is the danger from yellows?" Yellows cannot be told in the incipient stage. He thought it much safer to get trees from localities where no disease exists. There are certain counties in New Jersey, Delaware and Maryland where nearly every orchard is diseased, and the same is true of Michigan.

Mr. Brunson said that so far as he had read upon experiments it had been shown that diseased peach pits would not grow. He had found no yellows among the trees from Mississippi sent by Mr. Heath.

It was stated by Mr. Smith that others thought the Mississippi trees were infected with a worm or louse that clusters on the fibrous roots and kills the tree by extracting all the nourishment.

Mr. Aylesworth said in the east where the trees were affected they got two crops of peaches, then pulled the trees out, and we would have to do the same here; the disease was north, south and east of us.

Mr. Kane said that Monroe's large orchard at South Haven was infected with yellows, yet he always raised fine peaches by the method of pulling out the trees after they have borne two or three crops, and resowing with new trees.

Mr. Smith said that this method of pulling out trees originated in Michigan, and the east was not entitled to the credit for the discovery.

Mr. Crooks' remedy for yellows was to pull out trees as fast as they showed the disease.

On motion of Mr. Smith, the chair appointed a committee consisting of Messrs. Rufus Brunson, W. A. Smith and John Aylesworth to ascertain where the best trees can be obtained and on what terms; send to report at next meeting.

A committee of three, W. A. Smith, B. F. Pixley and U. B. Webster, were appointed by the chair to prepare a programme for next meeting, and reported as follows:

"Peach culture"—R. Merrill.

"Pear culture"—B. F. Pixley.

Question box—Secretary.

The discussion of peach yellows was resumed, and Mr. Handy remarked that no more was known now about yellows than one hundred years ago.

Mr. Smith said it was supposed that all peach growers knew the yellows.

Mr. Boynton had shown a yellow peach to an expert and he could not tell that it was diseased.

Mr. Watson believed every fruit grower who has lived here for years knows the yellows when he sees it.

Mr. James tells yellows by the color of blossoms in the spring, which he claims are about 50 per cent more highly colored on diseased trees than healthy ones. This is a new point to fruit-growers and will be observed with interest hereafter. Mr. James spoke of the healthy nurseries in Wisconsin and thought that a good place to get trees from.

Mr. Merrill thinks we should get trees from places where there is no disease, as trees may be grown from healthy pits or buds and yet have imbibed disease from the atmosphere.

Mr. Brunson said that at Ann Arbor a great many fine peaches are grown, and that would be a good point to get trees from.

Mr. Webster didn't think locally from which to get trees was much of an object. He sent trees from Carthage, Missouri, to a brother here 11 years ago; the yellows did not exist there. The trees bore two crops of peaches, and the second crop was unhealthy

from yellows; believes they were infected after being set out.

Mr. Spink examined the same trees with a view of buying some, and found them diseased the first year they bore.

Mr. Baynton said he got some of the finest trees he ever saw from New Jersey and they did splendidly, and he was well pleased.

Mr. Merrill said long shipments should be avoided as detrimental to stock. He also said the first question to decide was whether peaches can be profitably grown here; this should be carefully considered by those contemplating setting peach orchards next spring.

Planting an Orchard.

Although not claiming to be an experienced orchardist, says A. P. Reed in *Popular Gardening*, I have observed some things that I think would be of value to me if I should plant an orchard. In the first place I should put the trees into plowed ground. I should keep the ground plowed several years, till the trees came into bearing, cropping it all the while lightly, but putting in each year more plant nourishment than I take out, thus laying in a reserve fund for the support of the trees in years to come.

Then I would lay it down to grass, but keep the grass from growing for several feet around each tree by mulching quite heavily each year after haying, with leaf mould, compost, etc. In the meantime I would keep the ground well up with liberal top dressings. Thus managed, I do not see the necessity of plowing much if any in the orchard, after it comes to maturity, and it is certainly not convenient to do so among row trees such as I believe to; and thus managed, we shall find that no crop comes easier into our hands than the apple crop. An orchard where both the land and the trees give a good showing, even though the apples bring \$1 per barrel, pays a per cent. on the capital invested that any merchant would be proud of in his business. What way is there to earn a dollar any quicker or easier in horticulture than to pick a barrel of apples from a tree low?

Making Berry Boxes.

The thin quart and pint boxes now used in the marketing of small fruits, cherries, plums, etc., are far superior to anything ever invented for the purpose. Most of them come in sheets or finished, in carloads from the great northwestern forests. The process of manufacture is quite interesting.

The boxes are made of shavings. The thin sheets of wood which form the sides and bottom are nothing more or less than small pieces cut from a great pine, fir or whitewood shaving, and bent or fastened together in the shape of a box. These shavings, of course, are not like those which fall in graceful curls from the carpenter's plane, but are great, long sheets in each of which is almost the entire wood of a big log, and from a single shaving is frequently made from 2,000 to 5,000 berry boxes. The logs are brought down from the northern coast, are unloaded and floated into the barge close to the shore where the factory is located. From there they are hauled up on a tramway which runs into the water, so that the logs can be floated upon the car. When brought up the logs are cut by a dragsaw into uniform lengths as desired. These sections of the log are then placed in a large steam box, of which there are several convenient to the machinery, and left twelve hours subject to the effect of the exhaust steam from the engine. This softens the wood so that it can be cut into the thin sheets desired without checking or splitting into fragments. Sections of the great logs are rolled out of the steam box by two men, and after the center has been marked at both ends, they are hoisted by a small derrick and swung over a machine, the principal feature of which is a long bevel-edged knife, firmly set in an iron frame, in very much the same manner as the blade of a carpenter's plane is set. The cutting portion of this machine is a great monster shaving plane, with the edge of the blade fixed upwards. The log is next lowered by the derrick to its proper position, the operator of the machine pulls a lever, and two great clamps with strong, sharp-pointed jaws tie two inches long and advance their iron teeth into the marked centers at the end of the log. The great wooden cylinder is now held firmly in front of the blade of the immense shaving plane, and when the operator pulls another lever the log commences to revolve towards the cutting edge, exactly like the strip of wood in a turner's lathe revolves toward the chisel. Another pull by the operator, and the frame holding the great blade begins to move up to the revolving log. When the knife comes in contact with the steaming wood the outer edges are peeled off in thin strips without a sound of cutting, and the broad sheets roll out under the blade as easily and noiselessly as would a slice of cheese under a sharp knife. After the water-soaked, outer portion of the log has been trimmed off in this manner, the operator adjusts on the side of the log opposite to the cutting knife a number of small, chisel-like instruments at the end of which is a small, sharp cutting edge pressing against the log. These little cutters are placed at various distances, carefully measured by the operator, and evidently for an important feature of the operation. When the log again begins its revolutions against the blade of the great shaving machine there comes out from under the knife a long, wide, thin strip of wood, which the men pull out, roll and fold up like so much heavy paper. An examination of this great white shaving shows that its entire length has been marked by parallel lines cut partially through the wood, made by the little cutters at the back of the log. The wood bends readily at the partial cut which forms the angles of the box. Making the bottom, of course, consists in exactly the same operation, except that the strip used for this portion is not so long, having only two cuts and three segments. The middle segment forms the bottom of the box, and the two at the end extend upwards inside the frame formed by the longer strip. All but the small core of the log is turned off into this long shaving, one-twentieth of an inch in thickness and nearly 100 feet long, which is folded and broken into convenient lengths for handling as fast as it comes from the knife. The thin sheets of wood, as fast as they are taken from the machine, are placed upon a long table near at hand and pushed under a knife operated by steam power which cuts the wood into narrow strips, lengthwise, and of the proper width

for the sides and bottom of a berry box. The knife which cuts the long shavings crosswise, of course cuts lengthwise of the grain. The narrow strips, as fast as they are cut, are taken away by boys to a room where a number of boys and girls rapidly bind them into box form. The last step in the manufacture, which is done by girls, is the fastening of the bottom and side strips together. This is done by a stapler, which might very properly be called a wire sewing machine. The operator turns the side of the box to be fastened over a little plate, and presses the foot upon a pedal, and the small wire, which is fed from a cylinder, passes through the two strips and is clenched on the other side.

Raising Garden Seeds.

At a late meeting of the Boston Market Gardeners' Association, Mr. Aaron Low, well known seedsman, read a paper upon seeds, their variety and improvement.

The improvement of our garden seeds, he said, is effected in two different ways. First, by the careful selection of variations which are constantly to be found even in plants grown from the most carefully grown seeds.

The second way of improving seed is by hybridizing well known kinds so as to combine their good qualities.

A new variety when first produced by either of these methods will not come truly until it has been carefully grown for three or more years, so as to fix the new type.

In producing new varieties of potatoes we work differently; the potatoes we plant are not seeds but buds or cuttings of a swollen underground stem, and always produce the same variety as the parent plant; when we wish to improve or alter our varieties we must do so by planting the true seeds when we are found in the tubers or apples found on the vines after the blossom.

The old long red variety used to have plenty of flowers and balls, but the Early Rose and most recent varieties have comparatively few, making it more difficult to obtain seed.

If it is desired to cross two kinds of potatoes it can be done when they are both in flower by fertilizing one flower with pollen taken from the other kind and then saving the seed and planting the next year.

The new potatoes grown in this way will show a great variety of character, resembling one or both of the parent plants more or less, but the potatoes the first year from seed will be very small, from the size of peas to cherries. These potatoes planted the next year will grow larger, but it requires three to four years to prove the excellence of a new variety.

In growing sweet corn for table use it is rather difficult to keep the seed pure, it mixes so readily with other kinds of corn grown in the neighborhood even at considerable distances.

When it is desired to grow new varieties of corn we plant a hill of some well known and established sort such as the Grey with several hills of the other variety all around it, planting at such times that the two varieties will be in bloom at the same time. The ears thus grown will be mixed and by selecting such as we wish to perpetuate and growing them apart for three or more years, selecting seed each year, we can fix the type we wish to obtain.

Beets, onions and other root crops are improved by carefully selecting such roots for seed as we wish to grow, and doing this for several consecutive years will fix the type, so that the roots will come true.

It was in this way that the excellencies of the Dwing and Ed muds beets were fixed, and the well known Baxton onion seed.

Fuchsias may be wintered very well in a dark cellar, if it is dry, so that the plants do not mold. Late in the fall withhold water gradually until the leaves drop off, then put them away in this dormant condition, bringing them out in the spring to perpetuate and grow out again in March or as early as feasible.

A florist paid \$1,500 for the original plant of the chrysanthemum named Mrs. Alpheus Hardy, but he managed to make it earn him \$10,000 just the same. It was one of the collection sent from Japan to this country by a Japanese student who became acquainted with Mrs. Hardy. This variety is said to be especially beautiful and novel.

Peas and beans are improved by both selection and hybridizing.

The hybridizing of beans is done simply by planting the kinds near each other, they mix readily without any care, in fact it requires much care to grow pure bean seed that has not been mixed with some other variety grown in the neighborhood.

The varieties of beans that have been and may be produced are almost endless. In growing improved varieties of squash seeds a great advance has been made during the last ten or twelve years since the Turban and Hubbard has been crossed. The Essex Hybrid, the result of this cross, is a good keeper and has the other good qualities of the Turban variety. It still grows back somewhat as all squashes do, in fact it is almost impossible to make squashes breed true on account of the bees carrying the pollen from one flower to another.

I return it to the jar and let it arrive at boiling point, and then attach what I want to crystallize to a bar of wood laid across the mouth of the vessel but so that they are submerged and then strain through muslin.

When breeding a new variety, is to fertilize the flowers artificially, keeping them covered by netting so as to keep out the bees. When grown on a large scale in the field squashes always sport somewhat.

Good cabbage seed is greatly to be desired. We want a cabbage to make quick growth, a hard head and a short, small stump. They are improved by planting the varieties we wish to cross close together, and then fixing the crops by raising the new variety by itself for three years, selecting for seed only the best heads.

Clipping Currant Clusters.

Some experiments were made here last year with currants by removing the lower half of the flower clusters with a pair of scissors. It is a well known fact that only the berries of the currant are cluster, and the free end of the stem becomes dead before the fruit is ripe. By the removal of this portion before the flowers upon it have opened, it was hoped that there might be a larger and better fruit produced upon the remaining portion of the cluster.

In the experiment alternate bushes in a row were treated with the scissors, and in passing it may be said that that this method of thinning can be done rapidly. When the fruit was ripe, the whole product from an average bush, of the clipped and of the unclipped plants, was picked and spread out upon tables. Judges ignorant of what had been done were then called to inspect the results. No one failed to notice at once the difference and all pronounced in favor of the fruit that had been treated. The berries were larger and of more nearly uniform size and ripeness.

Two hundred berries were next removed from the uncut clusters and it required thirty-five clusters to furnish this number. They weighed, clean of all stems, 152 grams. The same number furnished by thirty clipped

clusters weighed 163 grams. These results show that there were about fifteen per cent. more berries to the cluster upon the cut plants than upon the ordinary ones and that these berries were about seven percent heavier. The question of quality was only determined by tasting, but there was no doubt in the minds of the judges that the thinned clusters bore fruit of the finest flavor. Like all other fruit currants sell somewhat upon their appearance, and there is no mistake upon the uniform size and ripeness of the fruit, the absence of the dead tops on the stems the clipped clusters were much more attractive.

Further experiments, and upon a larger scale, should be made; but the indications are that there is a point of practical importance in the clipping of the tips of currant clusters at the blooming time.—*Garden and Forest.*

Cold Storage.

C. L. Whiting, in his paper on "Disposal of Fruits" read before the West Michigan Fruit-Growers' Society, strongly advocated the building of cold storage houses for the keeping of fruit until it can be put on the market at a fair price. He says:

A cheap building yet useful and convenient may be constructed upon this plan: Site thirty feet by forty feet, 12 feet posts, span roof, two tier of studding, six by two, boated up on both sides and filled between with sawdust or shavings, space for storage twenty-four by thirty-six inches and eight feet high in the clear, covered above with tight galvanized iron floor upon two by twelve joists well supported; this floor should have a slight descent to one side with gutter to take off all water from the melting ice placed upon the floor above. The ice thus placed in quantity keeps the floor overhead at the lowest temperature and cools all the storage room below. The main floor should be well supported and of non-conducting material to prevent the escape of the cold air through it. Two doors would be needed at the entrance and it would be well to have the store room partitioned to make two rooms. The above is simple and useful, not expensive and may be varied in size, A number of fruit-growers might unite and build together a larger house in company and each and all together use it and have connected with it, in other buildings, means for otherwise using the fruit, as we shall now proceed to show. In leaving this part of our subject let us make one remarkable cold storage can only be used to keep fruit; it will not arrest decay nor cure imperfection.

FLORICULTURAL.

A FRENCH chrysanthemum grower has produced a plant, "Maid of Guernsey," six feet high, with a circumference of 20 feet and 300 expanded blooms. Quite a buxom "Maid."

The new potatoes grown in this way will show a great variety of character, resembling one or both of the parent plants more or less, but the potatoes the first year from seed will be very small, from the size of peas to cherries. These potatoes planted the next year will grow larger, but it requires three to four years to prove the excellence of a new variety.

In growing sweet corn for table use it is rather difficult to keep the seed pure, it mixes so readily with other kinds of corn grown in the neighborhood even at considerable distances.

When it is desired to grow new varieties of corn we plant a hill of some well known and established sort such as the Grey with several hills of the other variety all around it, planting at such times that the two varieties will be in bloom at the same time. The ears thus grown will be mixed and by selecting such as we wish to perpetuate and growing them apart for three or more years, selecting seed each year, we can fix the type we wish to obtain.

Beets, onions and other root crops are improved by carefully selecting such roots for seed as we wish to grow, and doing this for several consecutive years will fix the type, so that the roots will come true.

It was in this way that the excellencies of the Dwing and Ed muds beets were fixed, and the well known Baxton onion seed.

Fuchsias may be wintered very well in a dark cellar, if it is dry, so that the plants do not mold. Late in the fall withhold water gradually until the leaves drop off, then put them away in this dormant condition, bringing them out in the spring to perpetuate and grow out again in March or as early as feasible.

A florist paid \$1,500 for the original plant of the chrysanthemum named Mrs. Alpheus Hardy, but he managed to make it earn him \$10,000 just the same. It was one of the collection sent from Japan to this country by a Japanese student who became acquainted with Mrs. Hardy. This variety is said to be especially beautiful and novel.

Peas and beans are improved by both selection and hybridizing.

Black Lake, from Tracy's home. The body of Mrs. Tracy and her daughter were removed to an undertaking establishment and from thence taken to the Wh. to Hospital, where they were buried. Mrs. and Miss Wilmerding, members of Secretary Tracy's family, jumped from a front window, and were both severely injured, but it is thought not fatally. The sad disaster has plunged Washington society into mourning.

Foreign.

A cloudburst in China, near Nanking, drowned over 100 persons.

The Duke of Montpensier, fifth son of Louis Philippe, died at San Lucas, Spain, on the 4th.

An explosion in a saloon at Abenashaw, in Michigan, killed five men, injured 30 more. They were entombed for three hours, and about one-half of the number were dead or dying when rescued, being either burned to death or suffocated.

Mr. Farnell has won a complete victory over the Lowell Times, legal and morally. The Times has paid \$35,000 damages, and also settled the suit brought by Mr. Farnell a sum certain for damages, and paid costs of the Parnell suit, which mount into the thousands of pounds.

Hickory Grove Stock Farm
Young Shorthorn Bulls.

I have three young bulls two yearlings and a calf, of the Fox family, and a calf just born. I am willing to sell them at reasonable prices if applied for soon. These bulls are not only fine individuals, but their breeding is excellent. Call and see them or write for particulars.

A. A. WOOD,
Saline, Mich.

AUCTION SALE

Farm and Carriage Horses, Roadsters, and Poland-China Swine.

PONTIAC FAIR GROUNDS,
Wednesday, Feb. 26, 1890,

ONE O'CLOCK SHOT.

Fourteen Bambierians, three pairs of different sizes. Many to 1½ ds high, and weight from 150 to 1,000 lbs., having good & little action.

Twenty-four Shadelas d Prince by Bambier, and others of good breeding.

Five head Poland-China swine of the price of \$10 to \$15 each; also of the stock Moly. All eligible for registry in the P. C. R.

TERMS OF SALE.—In sums over \$10 one year's interest will be given on good sed. not less than 7 per cent.

A. E. GREEN, Proprietor.

D. DONALDSON, Auctioneer.

1890.

Send in your Entries at Once for the FIRST GRAND

COMBINATION SALE

of J. A. MANN & CO.,

To be held at Lansing, Mich., APRIL 29th and 30th.

A breeders' sale of Trotters, Stallions, Brood Mares, Colts, Saddle and Harness Horses.

Also a Special Sale of Draft Horses.

Lansing being the central part of the State, there is no better a place for this kind of sale in the U. S. Good buildings, good roads, first class hotels, good R. R. facilities. Please send in entries early. J. A. Mann & Co., Lansing, Mich. Entries close March 2d.

J. A. MANN.

BOIZE TURKEYS and PLYMOUTH ROCKS.

A VERY FEW more for sale. Eggs for sale in the spring. MRS. MARY H. WARRANT, Plainwell, Mich.

Percherons for Sale.

Pure bred and high grade

STALLIONS AND MARES

desirable ages, choice breeding, and individual excellence. The ardent herd in this part of the State. A large number bred by the Duke of Teus (40) and 150 others. Mares—\$48. Matched pairs—\$50. Also elegant pair of black and white Shetland Ponies. Stallions, one and two years old. Will sell together or singly. Prices very reasonable and see me or write for further information.

E. WOODMAN,
Paw Paw, Mich.

FOR SALE,
SHORTHORN BULLS.

Sold by Lord Kirkeville of Erie 44' 82 to 15 months old. These are fine individuals and will be sold cheap.

JOHN P. SANBORN,
Port Huron, Mich.

A Choice Registered

Black Percheron Stallion

For Sale at a Reasonable Price.

Comes three years old, with style action and quality, without blemish; weight now about 1,600 lbs. Sire and dam both prize winners and owned by us since a very young age. Large and strong, and young stock of both sexes. Inspection invited. Correspondence will receive prompt attention.

PARSONS & BALDWIN,
Watervliet, Mich.

Black Meadow Farm,

ROYAL OAK, MICH.

STANDARD-BRED TROTTERS,

BATES-BRED SHORTHORNS,

BERKSHIRE PIGS!

The high-bred trotting stallion

Teusha Grondie 5001, will make the season of 1890 at price now \$125. by the season, when due price is paid.

This stallion was bred by Spartacus 1912, x d. Judith (d. m. of Tarford 22:24) by Mambrino Chil-T. Sparta 1912, x d. Judith (d. m. of Tarford 22:24) by Mambrino Chief 11.

Watervliet Duke is at least of Shetland blood. Sired by 7th Duke of Leicester, 1875, g.d. Watervliet sired by 4th Duke of Clarence 1818, etc.

F. A. BAKER,
90 Buhi Block, Detroit, Mich.

HEREFORDS!

I have a few choice young

Bulls and Heifers for Sale

OF FINE BREEDING.

Prices reasonable. Catalogue furnished on application. Call upon or address

W. M. STEELE,
IONIA, MICH.

LIVE STOCK & REAL ESTATE AUCTIONEER

Sales made in any part of the United States and Canada. Terms reasonable and made known on application.



PERCHERON HORSES AT BARGAINS!

We mean exactly what we say. We have 140 Head Imported and Pure Bred Stallions and Mares, 6 French Coach Stallions, 26 Head of Grade Stallions and Mares, 20 Sheland and Exmoor Ponies, and 27 Head Registered Shorthorn Cattle must be disposed of during this year. We have a choice business. If you think of buying write us (describing what you want) for our Catalogue and Prices.

and we will convince you that it will pay you well to buy of us.

Island Home Stock Farm. SAVAGE & FARNUM, Detroit, Mich.

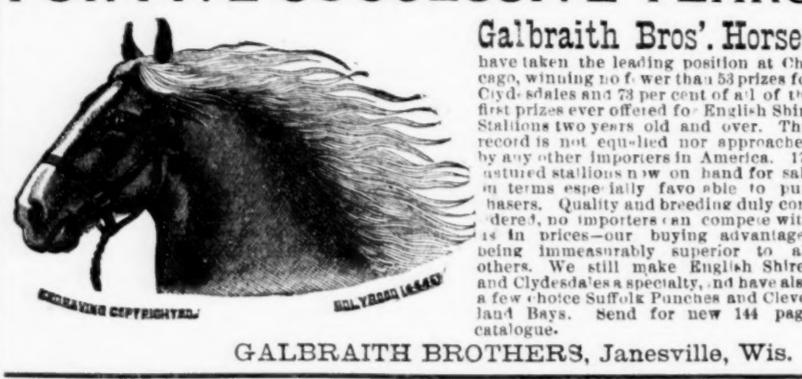
T. W. PALMER'S LOG CABIN STOCK FARM! 150 PERCHERONS. 100 JERSEYS.

To Be Disposed of this Season.

For catalogues and particulars address

4 MERRILL BLOCK, Detroit, Mich.

FOR FIVE SUCCESSIVE YEARS



GALBRAITH BROTHERS, Janesville, Wis.

CLYDESDALE STALLIONS FOR SALE CHEAP.

A grand lot of

YOUNG CLYDESDALE STALLIONS

coming three and four years old, will be sold at

LOW PRICES AND ON EASY TERMS,

to make room for new crop. These horses were all bred by me, go by such importers as

Young Wellington (1864) and Sir Arthur Ingram (1877)

and all out of Registered Imported Mares.

Having been bred in Michigan they are all culminated ready and ready for immediate service.

JAMES M. TURNER,
Springdale Farm, Lansing, Mich.

TO PREPARE FOR A CHANGE IN MY BUSINESS!

I will offer my entire stock of

200 CLEVELAND BAY and SHIRE STALLIONS,

Three and five years old, and 50 pure bred mares, sound, vigorous and fully acclimated, AT GREATLY REDUCED PRICES.

150 DEEP MILKING HOLSTEIN - FRIESIANS,

AT Correspondingly Low Prices.

Must Be Sold During the NEXT THREE MONTHS.

An opportunity rarely offered to secure such high class stock at the prices and terms I am prepared to offer. Send for pamphlet giving full particulars.

GEO. E. BROWN, Aurora, Ill.

EUREKA PLACE STOCK FARM!

GREENVILLE, MONTGOMERY CO., MICH.

J. S. & W. G. CROSBY, PROPRIETORS.

BREEDERS AND IMPORTERS OF

Clydesdale, Shire and Cleveland Bay Horses, AND SHROPSHIRE SHEEP.

Also Breeder of

Shorthorn Cattle and Poland-China Hogs.

Forty choice Shropshire Ram Lambs, 12 Imported Rams, and Imported and Home-Bred Ewes for sale. Four Imported Shire Stallions, two Imported Clydesdale and one Imported Cleveland Bay for sale. All registered in both English and American Stud Books.

SHORTHORNS.

A number of yearlings and bull calves for sale. Also stock bull Peri's Oxford 44536. Prompt attention given correspondence.

For SALE, CHEAP,

ELM GROVE BREEDING FARM.

One and one-half miles east of the City of Flint.

This farm, formerly occupied by Thos. F. Fawcett, contains 160 acres, is in the highest state of cultivation, having always been up to stock farm; is in all well tile drained and well fenced. The buildings are large and ample and in good repair.

WM. W. CRAPO, Proprietor.

For price and further particulars apply to DR. JAS. C. WILLSON, or JOHN W. FOLTER, Flint, Mich.

J. F. SADLER, New York City.
L. L. SADLER, Cincinnati, O.

J. F. SADLER & CO., LIVE-STOCK COMMISSION, NEW YORK CENTRAL STOCK YARDS.

C. F. MOORE, ST. CLAIR, MICH.

STANDARD-BRED TROTTERS, BATES-BRED SHORTHORNS, BERKSHIRE PIGS!

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F. A. BAKER, 90 Buhi Block, Detroit, Mich.

HEREFORDS!

I have a few choice young

Bulls and Heifers for Sale

OF FINE BREEDING.

Prices reasonable. Catalogue furnished on application. Call upon or address

W. M. STEELE, IONIA, MICH.

LIVE STOCK & REAL ESTATE AUCTIONEER

Sales made in any part of the United States and Canada. Terms reasonable and made known on application.

J. A. MANN, Lansing, Mich.

HEREFORDS & COWS!

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W. M. STEELE, IONIA, MICH.

LIVE STOCK & REAL E

Poetry.

THE OLD-FASHIONED COFFEE MILL.

When you're just 'bout half awake,
An' the roller poundin' steak
Makes a noise 'at almost drowns
All them other kitchen sounds,
One o' em', 'at's my favorite,
Tain't no old maledone.
"Days of Absence," "Bunny Dooey,"
Nor them other tunes we sing
Long ago when we was young;
But it's the more sweater sound,
When the coffee's parched and browned,
Mother's grinding it to kill
From the old time coffee mill.

When your jest 'bout half asleep,
Wh le the early robin peep,
An' your soul a safin' goes
In a sort o' dreamy dose,
Floatin' round, an' round, an' round
On the papatin' sound,
Dreams of butterflies in hocks,
Sippin' pinks an' hollyweeds,
Takes you back to that sweet time
When your life was like a rhyme,
An' you don't have to do
Only what you wanted to;
Then your thoughts 'll flutter still
Round that old-time coffee mill.

Seems like that low, rumblin' noise,
Way down states, 'st waked us boys,
Set us all to thinkin' things,
Like old songs an' rings, an' rings
Thro' your head, an' won't be still;
"A boy's will is the wind's will."
"An' his thoughts is long, long thoughts,"
An' we talked of lots an' lots
Of grand things we'd posed we'd do,
An' kept wishin' they'd come true.
Oh, them joys we used to feel;
How Time's mashed 'em with his heel.
Like the broken grains 'at fill
That old-fashioned coffee mill.

—Louisville Courier-Journal.

CROSSING THE BAR.

Bonnet and evening call for me;
And may there be no moaning of the bar,
When I put out to sea.

But such a tide as moving seems asleep,
Too much for sound and foam,
When that which drew from out the boundless
deep
Turns again home.

Twilight and evening bell,
And after that the dark!
And may there be no sadness of farewell
When I embark.

For though from out our bourne of Time and
place
The flood may bear me far,
I hope to see my pilot face to face
When I have crossed the bar.
—Tennyson's Lates.

Miscellanous.

A FASHIONABLE PHILANTHROPIST.

Mrs. Jane Maria Trucce was a most charitable lady. Out of the very considerable wealth which the late lamented Sam Trucce had left her she contrived to spare a good deal for what she considered deserving objects. Unfortunately, however, the direction of her charity was largely influenced by feelings other than those of pure benevolence, and consequently, what she considered deserving objects were often hardly those that excited the sympathy of the unblended philanthropist.

The feelings which had most influence in directing or misdirecting her charity were those she was pleased to entertain on politics. To be sure, she knew nothing in the world about politics. That, however, did not prevent—perhaps, indeed, it rather assisted—her being a tremendous Tory. She was a Primrose dame of high degree, a liberal subscriber to every anti-Liberal undertaking, a bitter desipser of all parties and persons whom smart people consider "low," and a profound and ecstatic admirer of that fashionable society about the purloins of which she was delighted to move.

Her political ideas acted on her charitable feelings in this way. They made her very careless about the sorrows and miseries of the real poor, and very attentive to every cry of distress raised by the unhappy wealthy classes. Reports of destitution in the east of London, or of famine among the cottagers of the west of Ireland, moved her very little; but when she heard lord this or lady that dilating on the woes of the money lenders and exploiters of Egypt, or of the rack renters and extortions of Ireland, she was quite overcome with sympathy and sorrow for their troubles, and ready to subscribe any amount to assist them in their cause.

It was the morning following the final meeting for the season of one of these committees—one for the protection of Irish landowners—and Mrs. Trucce was seated at her breakfast reading the annual report. In it her name was several times mentioned, and mentioned, too, in connection with those of two duchesses, one marchioness, three countesses and various other ladies of lesser title. As the widow read she could not help feeling with a benevolent glow on her face, that after all, virtue is its own reward.

She had just finished the report, and was sitting reflecting how she could further show her devotion to so deserving a cause, when her meditations were interrupted by the advent of the butler. He brought her a gentleman's card. Astonished at such a very early visit, Mrs. Trucce took the card, and putting on her spectacles, read the name on it.

"Mr. Eustace Burke," she said. "Who is this person, Soker? I never heard of him before."

"Don't know, ma'am," replied Soker. "He says he wants to see you on very important business."

"Indeed," said Mrs. Trucce. "That's very strange. What does he look like?"

"Oh, very gentle, ma'am. Looks like

a gentleman a little bit down in the world."

The amiable Soker was a shrewd judge of character and his mistress put great reliance upon the estimate he formed of strangers and acquaintances.

"Well, I'll see him. He's in the library, I suppose?"

"Yes, ma'am."

When Mrs. Trucce entered the library she found that Mr. Eustace Burke answered very well to her butler's description of him. He was a tall, rather handsome man, with, in spite of a threadbare coat and an appearance of poverty, a certain air of distinction about him. His manners, too, were refined and high bred. The bow he gave Mrs. Trucce as she entered the room was so dignified and at the same time so pathetic that the good lady's heart quite melted toward him. She saw at once that he was just the sort of person she always pitied—the person who, after having lived for years on other people's money, is now reduced to the sad necessity of trying to live by his own.

After a formal greeting the stranger spoke:

"I trust, Mrs. Trucce," he said, "that you will forgive the liberty that I, a complete stranger to you, have taken in daring to call on you. I assure you that nothing but your reputation for kindness to the unfortunate is to blame. If you will be benevolent and generous to those who have had disasters in the world's struggle, you must expect, Mrs. Trucce, occasionally to have a miserable being like myself appealing to you for assistance."

Mr. Eustace Burke said this in such a nice, flattering way that Mrs. Trucce's already good opinion of him was considerably enhanced.

"I am always ready, sir," she said, "to assist, as far as my means allow, persons deserving sympathy."

"I know it, madam," answered Mr. Burke, "but the assistance I want from you is not pecuniary assistance; I merely want your help to put me into a position where I can earn my bread."

"Indeed," said Mrs. Trucce, still more favorably impressed. "May I ask for a little information as to your antecedents and claims?"

"Certainly, madam," answered Mr. Burke with a sigh, "although the subject is to me a most painful one. I belong to that most unfortunate class of men, Irish landlords. I still nominally possess a considerable estate near Ballymulewack, and I am cousin to Lord Grabmore of that neighborhood, of whom, perhaps, you have heard."

"Oh, yes," put in Mrs. Trucce quickly, "I met him once at a Primrose league meeting."

"Ah," said Mr. Burke with satisfaction, "then we are not quite such strangers after all. When I called at your door I little knew that you and my distinguished relative were friends."

"Well," said Mrs. Trucce, blushing a little at the idea of being thought a friend of the great Lord Grabmore. "Well, we're hardly friends."

"At least, acquaintances," said Mr. Burke. "But to resume, Madam. Some years ago my income from that estate was counted in thousands; to-day I don't receive from it a penny. My wife, who once had her carriage and footman, is now actually in want of bread!"

"Dreadful, dreadful!" exclaimed Mrs. Trucce.

"You may well say so, madam. We have neither bread to eat nor a roof to cover us. It is in this fearful state that, as a last resort, I have come to you to assist me to obtain a place where I can earn enough to keep body and soul together." And Mr. Burke, as he spoke, nearly sobbed with emotion.

"Mrs. Burke, you may rely on me," cried Mrs. Trucce. "What sort of a place would you like?"

"Madam, your kindness overpowers me," said Mr. Burke in a broken voice, "and yet it is what I should have expected. Madam, I was brought up a gentleman, and so know none of the vulgar ways of earning a livelihood. The places I am capable of filling are only humble ones. I can think of one only. Many people of fashion—youself, probably, among the number—will soon be leaving town. Caretakers will be wanted to look after the houses. Do you think you could get any of the nobility or gentry of your acquaintance to accept the services of myself and wife in this direction?"

"Certainly, Mr. Burke, most certainly," said Mrs. Trucce. "As you guess, I'm leaving town myself—for my house at Hastings—and taking my servant with me. I usually get policemen to live here when I'm away, but I shall only be too happy to have you and your wife instead."

Mr. Eustace Burke overpowered the good lady with fervent thanks. He assured her over and over again that she had saved him and his poor wife from absolute starvation, and that he never could, should, or would forget her kindness to him. Then at last he rose to go.

It was only now that he was about to leave that it occurred to Mrs. Trucce that she was acting with hardly her usual prudence. In her charitable haste to help the distinguished paper she had quite forgotten to ask him for references to show that he was as distinguished as he said. She had had a good deal in her lengthened experience of the world of rogues who were very clever at passing themselves off as gentlemen, and, in spite of her own and her butler's opinion to the contrary, Mr. Burke might not be the broken-down aristocrat he seemed to be and said he was.

"Now, however, that she and he had, as it were, become acquainted, she felt rather embarrassed about asking him for references of character; it seemed like throwing doubt on his truthfulness and honor. Still she felt that it must be done. As, therefore, he moved toward the door she said, in a hesitating way:

"But, Mr. Burke, perhaps you would be so kind—" And with this she came to a full stop.

Mr. Burke, in a moment, perceived what she meant and came to her relief.

"Oh, I understand, madam," he said, with a smile. "How stupid of me, to be sure, not to have thought of that before! Of course, you want references to prove to you that I am who I represent myself to be and that my sad story's true. I think I have letters with me that will satisfy you on both points."

He took a number of letters from his

pocket, and selecting two among them, handed them to Mrs. Trucce. One was from the Rev. Mr. Mortmain, vicar of Snobton, and Knight Almoner of the Primrose League, in order to prove to her how the perfidious policy of the monarchies in Ireland has reduced Mr. Eustace Burke from affluence to poverty and strongly recommends the case of this unfortunate son of a noble house, ruined by the dishonesty and covetousness of the lower orders, to the benevolent consideration of happier members of his own class.

It ran as follows:

CURZON AND SWARREN HABITATION, P.

L. SNOBTON.—The Rev. Mr. Mortmain,

the Amiable Soker was a shrewd judge of character and his mistress put great reliance upon the estimate he formed of strangers and acquaintances:

make a noise 'at almost drowns

All them other kitchen sounds,

One o' em', 'at's my favorite,

Tain't no old maledone.

"Days of Absence," "Bunny Dooey,"

Nor them other tunes we sing

Long ago when we was young;

But it's the more sweater sound,

When the coffee's parched and browned,

Mother's grinding it to kill

From the old time coffee mill.

When your jest 'bout half asleep,

Wh le the early robin peep,

An' your soul a safin' goes

In a sort o' dreamy dose,

Floatin' round, an' round, an' round

On the papatin' sound,

Dreams of butterflies in hocks,

Sippin' pinks an' hollyweeds,

Takes you back to that sweet time

When your life was like a rhyme,

An' you don't have to do

Only what you wanted to;

Then your thoughts 'll flutter still

Round that old-time coffee mill.

When you're just 'bout half awake,

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An' you don't have to do

Only what you wanted to;

</div

THE LITTLE KING.
A little face to look at,
A little face to kiss,
Is there any thing, I wonder,
That's half so sweet as this!

A little cheek to dimple,
When smiles begin to grow,
A little mouth betraying
Which way the kisses go.

A slender little ringlet,
A rosy little ear,
A little chin to quiver
When I kiss you.

A little hand so fragile,
All through the night to hold,
Two little feet so tender,
To tuck in from the cold.

Two eyes to watch the sunbeam
That with the shadow plays—
A darling little baby
To kiss and love always.

—Leeds Mercury.

DURING THE WAR.

Two Incidents in the Career of an Express Messenger.

In the First the Robbers Got Bally Left, and in the Second We Came Out Best in a Trial of Shoot-ing-Irons.

Even in these days of peace, with every money-handler armed for defense and surrounded by every safeguard, banks are "touched," stages held up, express cars robbed, and the highway robber and the horse thief have no complaints of lack of business. This being the case now, you can imagine the state of affairs during the war, even though we were not a living witness. Along about 1863 the bad men of the times reaped a constant harvest. Money was abundant, every day full of excitement, and embezzlers and absconders outnumbered honest men. And, too, banks, express companies and other big money-handlers were green to many of the tricks and schemes, and the idea of buying a revolver for an express messenger out of company funds would have been looked upon as "an act of Providence."

My first adventure occurred while making the run between Cincinnati and St. Louis. I had been on the road about six weeks, and the business was so heavy that we had to have an extra man. While I took charge of the money, he looked after the parcels and boxes, and we had a whole car to ourselves. My assistant was named John Goodhue, and he had been one of the check clerks in the freight department of the Cincinnati office. He was an easy-going, good-natured man of forty, much given to taking things easy, but as he was the only man the company could or would spare I had to take him, as I found him and make the best of it. Whenever we pulled out of either city we were very busy for the first half hour. I saw that everything was properly checked off and accounted for in the line of money and valuables, and then assisted him if he was not already through. It thus sometimes happened that I was busy at my safe in the corner for the first twenty miles out and that little or no conversation was exchanged between us.

This particular evening Goodhue was ten minutes late at the train, but he took hold with unusual spirit, and when the stuff was all in, we had the car pretty well filled. I was at my safe when the train pulled out and I heard Goodhue moving about and going through the usual routine. We had nothing to put off until we reached a farm thirty miles away and then it was something in the line of freight. I therefore took things easy and was smoking as I did my work. I had on the visor of my cap, both arose, stretched themselves, and as the sergeant started for my end of the car the other unlocked the door and admitted two men. I was sitting on this and bending over my own when I received a blow on the head from behind. It fell upon the left side of my head and glanced to the shoulder, but it knocked me over sideways in a heap on the floor. I was not stunned, but it came to me in a second to "play possum." Even while falling I realized that it was a plan to rob me, but the voice of Goodhue had struck me, and I wondered who Goodhue had behind him. I rolled over on my back, groaned two or three times and then straightened out, and after a minute I heard a voice say: "Come out, Jim—he's settled!"

It was the voice of the man who had struck me, but not the voice of Goodhue. I heard a second man come forward, and then the plot was exposed. Neither was Goodhue, and both were strangers.

"Gross you've done for him, Tom," said the last comer as he stood over me.

"Couldn't help it, Jim—he'd had us a fight if I hadn't. Now, then, we've got things coopered. In five minutes we shall be at Blankville. There's nothing to go off, but I'll open the door. Get on the safe."

The whistle blew, the train slowed up, and pretty soon we were at a standstill.

The robber opened the sliding door and stood as cool as you please for two or three minutes, and I heard him reply to the agent that there was nothing to go off, but I'll open the door.

"I'll be on the safe."

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Continued from first page

For the preceding ten years \$19,000,000 bushels. The area increased from 25,000,000 acres to 37,000,000 acres, an increase of nearly fifty per cent. For the past thirty-five years the increase of population has been 141 per cent, and the increase in the production of wheat has been 410 per cent. With corn the increase in production and acre is even more marked. In 1850 we produced almost 3,000,000,000 bushels of corn; the annual average for the ten years preceding 1880 was but 1,184,000,000. The area planted to corn in 1888 was 75,672,000 acres; for the ten years preceding 1880 the average was but 45,741,000 acres. Of oats our yearly average between 1870 and 1880 was 31,000,000 bushels; our crop of 1888 is 701,000,000 bushels. The area increased for the corresponding dates from 11,000,000 acres to 27,000,000 acres, an increase of over 150 per cent. The tendency of this increase has been toward less acreage for these products, and a corresponding price for wheat from 1850 to 1870 was \$1.23 per bushel, from 1884 to 1888 it was 92 cents per bushel. Corn and oats have been much lower in price also, and cheap corn and oats mean cheap cattle, sheep and hogs, and hard times for the farmer.

The increase of production has been largely in our western states and territories, lands free from stumps or stones and of unsurpassed fertility, of which our government gave a farm to every settler. With their land costing them almost nothing, their soil unequalled, they can raise products and sell them at a price which leaves a margin for themselves, but we would need no such.

In 1888 Dakota raised 300,000 bushels of corn, or more, in any other State in the Union. In 1888 Texas had almost 8,000,000 head of cattle, while Michigan had but 263,000. In 1870 the central belt produced fifty per cent of the wheat raised in the United States. The country beyond the Mississippi produced thirty-seven per cent. In 1884 the central belt produced only thirty-six per cent, while the country beyond the Mississippi produced fifty-one per cent. In these days of quick transportation our products come in direct competition with ours, and when they sell their wheat for forty to fifty cents per bushel, corn for a shilling and oats for ten cents per bushel, it means hard times for us. The cause of hard times among farmers I think is the increase in the use of labor-saving machinery.

We find the farmers using the self-blinders and machines for nearly all kinds of their work. Our large manufacturers are using labor-saving machines to even a greater extent than the farmer. The increase in the use of these labor-saving machines throws thousands of men out of employment, and many of these instead of being only consumers of our products, become producers; instead of the money going to the laborer and small manufacturer, it is circulated in the farming community, it is swallowed by these giant corporations, and we are non-producers. If labor-saving machines were only used by a few they would be a benefit to the user; when used by all, the tendency is to lower the price of the product produced.

Another cause of hard times in this section the past few years, has been the severe droughts and consequently poor crops. A few years ago we thought nothing of raising twenty to thirty bushels of wheat to the acre, late years ten to fifteen bushels to the acre is more common. We have not had a full corn crop for several years now. We have seen car-load after car-load of corn shipped from other States to almost every railroad station in our country. We have had import potatoe even among our farmers. Our hay crop has been light, pastures poor.

It is also noticeable that, for the entire country, while the area of our products has increased rapidly the average per acre has decreased. Our average yield of corn between 1870 and 1880 was 27 bushels to the acre; from 1880 to the present time it has been 23 bushels to the acre. Our average yield of wheat to the acre between 1870 and 1880 was 10 bushels to the acre; the yield to the acre is now 8. Oats decreased for the corresponding dates from 24 bushels to 26 bushels to the acre. Another cause of hard times among farmers is the increase of their expenses. It costs more to bring up a family now than it did fifteen or twenty years ago. Many things that were considered luxuries then have become necessities now. The farmers' children are better educated, his family dress better, live more expensively, have better horses and carriages, travel more and read more. While not wishing to return to the former mode of living, yet all the help to lower his pocket book.

The farmer has been compelled to accept lower prices for his products, the manufacturers yet look for their old profit, and if their articles become too plenty they will combine and shut down until there is a demand for their articles at their prices. The railroad charges for carrying our products are still nearly the same as they have been, and we find some of them paying their officers a salary equal to that of the President of the United States. Our salaried men receive as much or more than they did when wheat was 10 or 12 shillings per bushel. A salary of \$1,000 a month will suffice a man as much as \$1,000 a year a few years ago. Money is letting at the same rate of interest it has been for years. Farming tools are too high, the manufacturer, general agent, State agent and local agent all look for a profit of from 20 to 40 per cent. The farmer pays it. When the farmer has anything to sell he looks for what he can get, usually 20 to 40 per cent below cost of production. This makes hard times for the farmers.

Are these hard times to continue, or may we look for a return in the near future? While the farmer looks as bright as ever, yet the tendency I think will be toward better times. Our population will not increase as fast as it has in the past; the best of our lands are under cultivation. Our population is increasing rapidly. At present we consume nine-tenths of all our farm products at home. Of our wheat in 1889 we consumed sixty-two per cent, in 1888 seventy-four and seven-tenths per cent.

We hope for a return of better seasons. A lot more care will probably prevent one of the first effects of hard times is a demand for money. People find themselves a little short and have to borrow, but as these debts become settled, people will be careful about contracting new ones, money will be more plenty and the rate of interest lowered.

We are learning to be more economical in our farming, we take better care of our crops and tools, feed and house our stock with more care, but there is much to learn yet in this direction.

There are things will work themselves to their proper level, there are others that need the attention of farmers, some by proper legislation and others can be done independent of it. Let us endeavor in what we buy to purchase as nearly as possible direct from the manufacturer. Of our products that we have to sell let us sell as direct to the consumer as possible, and do away with so many profits. The farmer pays them.

A wholesale dealer in the time that farms and organizations themselves. The Grange, Farmers' Alliance, Patrons of Industry, and Farmers' Clubs increasing rapidly. But someone says they never will accomplish anything. Why not? Nearly every industry is organized. Manufacturers, railroads and mining interests all combine and with good results to themselves. The laboring men belong to their organizations, and when they want legislative favoritism to them demand it and are often successful. And when they have this of mighty strength, when greatness, prosperity and very existence depend largely upon the farmer, stand back and fold arms and exclaim. Hard times! but no use, we can't help it. Shall we become merely the foundation upon which other industries prosper? If we do we are not worthy the name. Let us combine ourselves into one grand organization, drop party lines and demand legislation that shall compel our railroads to carry

our produce at a fair rate, that shall crush these monopolies and trusts, that while it shall be just to all will leave the farmer a fair margin of profit.

FAIR for sale of 520 acres in Crookery township, Ottawa County. One of the best farm houses in the county; ample barns and sheds, large apple orchards, well watered, and situated near the village of Nunica, on the D. G. H. & M. R. R. This is one of the best stock farms in the State; also well adapted to all kinds of grain, and will be sold very cheap. Immediate possession given. Will also be sold in parcels of 40 acres and upwards to suit purchasers. Terms easy. For full particulars call on or address George D. Turner, care of First National Bank, Grand Haven, Mich.

Veterinary Department

Conducted by Robert Jennings, Veterinary Surgeon. Professional advice through the columns of the Michigan Farmer to all regular subscribers free. The full name and address will be necessary to receive my services. The symptoms should be accurately described to ensure correct treatment. No questions unanswered professionally by mail unless accompanied by a fee of \$1.00. Address, No. 201 First St., Detroit, Mich.

Probably Pityriasis in Cattle.

Lakeview, Feb. 3, 1890. Veterinary Editor of the Michigan Farmer.

Will you please tell through the columns of the FARMER the cause, prevention and remedy of an itching eruption which attacks young (cattle) animals around the nose, mouth and eyes; the spots are devoid of hair, and soon present a white appearance, seem to cause much irritation and annoyance to the animal; the better condition the calves are in the more susceptible they are to the disease. S. J. Y.

Answer.—From your description of the symptoms in the skin about the eyes and nose of your cattle, it is difficult for us to determine its true character in the absence of a minute description of the symptoms, and the general condition of the animals, what care they have had, fed etc., as there are a variety of skin diseases closely resembling one another, yet requiring quite different treatment, care and attention. The writer, asking veterinary advice in this column, should be careful in describing symptoms, as our advice depends entirely upon the correctness of their description. We are inclined in this case to diagnose the disease as pityriasis, the result of superficial inflammation of the skin about the eyes, lips, etc., or it may be due to parasitic action. Give the following: Flour of sulphur, four ounces; nitrate of potash, two ounces; reduce all to powder, mix well together. Dose, one teaspoonful, night and morning, upon the tongue, or in the feed if the animals will eat it. Apply the ointment around the cornea also. Repeat if necessary.

Contracted Feet and Swelled Knee in a Horse.

KELLOGG, Feb. 3, 1890. Veterinary Editor of the Michigan Farmer. I have a mare, 13 years old, has tender feet, fore foot slightly contracted, travels a little stiff. About two months ago there came a swelling on the left fore leg just below the knee, on back side of leg, of the cords; at first it was quite soft but is becoming harder, and the last few weeks she has been quite lame. The swelling is on both sides of cord, but mostly on outside, about half as large as a hen's egg. Any information in regard to a remedy will be thankful received. W. J. C.

Answer.—Apply the following: Blisters of mercury, one part; vaseline or lard, eight parts; well mixed. Apply to the part, and give the animal rest. Apply the blister around the cornea also. Repeat if necessary.

Collar Bruise on a Horse.

Veterinary Editor of the Michigan Farmer.

I have a horse four years old last May; he has a hard lump in the skin about three inches above the point of shoulder, caused by being galled by a bad collar. The lump is as large as a hickory nut, and seems to grow. Commended to grow. June. Please state how I can remove the lump.

A SUBSCRIBER.

Answer.—If the tumor is soft, pass a seton through it. If hard have it cut out by an experienced veterinary surgeon.

Commercial.

DETROIT WHOLESALE MARKET.

Detroit, February 8, 1890.

FLOUR—Market quiet; Minnesota goods lower. Quotations on car load lots are as follows:

Michigan roller process..... 5 80 60
Michigan patents, old..... 4 30 40
Minnesota, bakers..... 3 40 50
Minnesota, patent..... 4 40 50
Huron..... 3 40 50
Low grades..... 2 25 35

WHEAT.—Quotations on spot range about the same as a week ago, with the lower grades firmer. Futures are steady, with May lower than last week. Trading very light. Quotations on this market yesterday were as follows: No. 1 white, 77¢; No. 2 white, 73¢; No. 3 white, 65¢; 2 red, 75¢; No. 3 red, 73¢; No. 4 red, 65¢; rejected red, 60¢. Closing prices on futures were as follows: No. 2 red, March, 78¢; April, 80¢; May, 81¢.

CORN.—More active. No. 2 spot quoted at 31¢; No. 3 red, 29¢; No. 4, 28¢; No. 5 yellow, 34¢.

OATS.—Lower. No. 2 white, 25¢; light mixed, 21¢; No. 2 mixed, 21¢.

BARLEY.—Market firm; now quoted at a range of 20¢ to 25¢ per bushel to fair choice samples. Receipts the past week, 44,188 bushels; shipments, 3,681 bushels.

CLOVER SEED.—Lower. Prime spot, 85¢ per bushel. No. 2 spot, 80¢ per bushel.

RYE.—Quoted at 40¢ per bushel and firm.

TIMOTHY SEED.—Job lots in bags quoted at 31¢ to 35¢ per bushel.

SWINE.—Dairy is quoted at 14½¢ per good for choice. Low grades unsaleable. Creamery quote at 20½¢ per bushel.

FEED.—Winter bran quoted at \$10.00 to 10; middlings, 10 to 12; shelled, 10 to 12; bran, 8 to 10.

FEED.—Buckwheat quoted at 14½¢ per good for choice. Low grades unsaleable. Creamery quote at 20½¢ per bushel.

CHEESE.—Unchanged. Michigan full creamed butter at 11½¢ per lb. and New York same figures.

Eggs.—The market is lower at 10¢ per dozen. Receipts of fresh have been large, but are falling off.

HONEY.—Quoted at 10½¢ per comb. Extracted, 7½¢. Market dull.

HAY.—Timothy in car lots, \$9.50 to 11; in small lots, \$10 to 12; clover, in car lots, \$9; in small lots, \$11; straw, in car lots, \$9.50 to 11; in small lots, \$12 per ton.

BALM.—I am not getting more than my share I should like you to tell me the disease and the remedy for some hogs. They came about April 29, '89, they are what we call here a cross between a Pando-Cana and the Jersey red. The first of Sept. they commenced to get sick; would come to the trough, eat some, run back, fall down; a slimy water ran from their mouth, can hardly walk, hind legs the worse, will set on hind parts and stand in front; squeal if pressed; when I took them on their bellies it will slide on hind parts, seem to be sore in front of the hips and just below the back bone. Were fat when got sick, have fell away from one-half to two-thirds, have been fed corn in the ear, and I kept them on a floor most of the time. This is as near as I can describe them.

SUBSCRIBER.

Answer.—Your description of symptoms in your hogs indicate disease of the kidney, or paralysis of the hind quarters, the cause for which we are unable to determine.

Sulphate of magnesia, two ounces; Jamaica ginger root, pulv., one ounce; mix and divide into eight powders; give one in the feed night and morning. Follow these powders with the following: Nux vomica, pulv.; half an ounce; Lini farina, two ounces; mix and divide into 30 powders; give one in the feed night and morning. Bathe the loins once a day with some good liniment. We can recommend none better than Evinco liniment. It costs more to bring up a family now than it did fifteen or twenty years ago. Many things that were considered luxuries then have become necessities now. The farmers' children are better educated, his family dress better, live more expensively, have better horses and carriages, travel more and read more. While not wishing to return to the former mode of living, yet all the help to lower his pocket book.

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When the farmer has anything to sell he looks for what he can get, usually 20 to 40 per cent below cost of production. This makes hard times for the farmers.

Are these hard times to continue, or may we look for a return in the near future? While the farmer looks as bright as ever, yet the tendency I think will be toward better times. Our population will not increase as fast as it has in the past; the best of our lands are under cultivation. Our population is increasing rapidly. At present we consume nine-tenths of all our farm products at home. Of our wheat in 1889 we consumed sixty-two per cent, in 1888 seventy-four and seven-tenths per cent.

We hope for a return of better seasons. A lot more care will probably prevent one of the first effects of hard times is a demand for money. People find themselves a little short and have to borrow, but as these debts become settled, people will be careful about contracting new ones, money will be more plenty and the rate of interest lowered.

There are things will work themselves to their proper level, there are others that need the attention of farmers, some by proper legislation and others can be done independent of it. Let us endeavor in what we buy to purchase as nearly as possible direct from the manufacturer. Of our products that we have to sell let us sell as direct to the consumer as possible, and do away with so many profits. The farmer pays them.

WILLIAMSTON, Mich., February 5, 1890. Veterinary Editor of the Michigan Farmer.

Will you please inform me through the columns of the FARMER what to do for hogs. I have some registered Polon.-Quina hogs and I find a queer looking spot on them; they are the shape of head like ours, or six times as large, and darker in color. C.

Answer.—Scrub the hogs clean with castile soap and water, chill taken off, then rub dry, and apply a solution of carbolic acid, one ounce; tepid water, one quart; mix well together before using. Clean out the pores and give a good supply of clean fresh straw. Rub them well with sulphur ointment.

What Ails the Hogs.

WILLIAMSTON, Mich., February 5, 1890. Veterinary Editor of the Michigan Farmer.

I have four Poland-China pigs, about four months old, which I bought two months ago, and since that time have fed them mostly on corn and wheat, and slops from the house. About three weeks ago one of them began to get lame in hind legs, and another two legs also, and about two weeks ago another one was lame in the same way. Now the third one is coming down in the same way. I have two pigs has lame before and got over it in a few days so I haven't done much for them. I did wash their legs in strong soap and gave them a good rubbing. They don't eat much, don't come out unless I go in and drive them out; I have kept them on a floor and cleaned it out once a week, and gave them new straw. Has kept them in a bra's kettle. How kept them well?

A SUBSCRIBER.

Answer.—From your description of the symptoms in your pigs we can only say

without landmarks to guide us in diagnosing diseases in our domestic animals our prescriptions would be of little use. The use of brass or copper vessels, as both corrode, the corrosive substance mixing with the feed, "causing enlargements about the joints, and pernicious exostosis of the bones." These alterations probably have no existence in your hogs, or you would have mentioned it. As a precautionary measure we would advise you to give each hog one or two ounces of sulphate of magnesia in their feed, and report to us, after a close examination, the symptoms as they are. Keep the pen well cleaned and littered.

LIVE STOCK MARKETS.

King's Yards.

CATTLE.

The market opened up at these yards with 80 head of cattle on sale. The supply was rather light, the demand active and the receipts changed hands at prices somewhat higher than was paid at these yards last week.

Campbell sold John Robinson a mixed lot of 12 head of thin butchers' stock av 85 lbs to \$12.40.

Brennan sold John Robinson a mixed lot of 10 head of fair butchers' stock av 85 lbs to \$12.40.

Friday—29 loads: Eight at \$12; six at \$13; four at \$14; three at \$10; two at \$12.50 and \$9.

Saturday—29 loads: Eight at